PROGRESS REPORT OPERABLE UNIT 2 - OTHER WASTE UNITS OCTOBER 1993

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Remedial Investigation/ Feasibility Study

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Operable Unit 2 OTHER WASTE UNITS

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Introduction

PROGRESS REPORT

The Remedial Investigation/Feasibility Study (RI/FS) is the blueprint for cleanup at the U.S. Department of Energy's Fernald Environmental Management Project. The nature and extent of contamination at the Fernald site and surrounding areas is being thoroughly investigated so that appropriate remedial actions can be formulated and implemented.

The Fernald site has been divided into five sections, known as Operable Units, for environmental investigation and cleanup. The Operable Units were defined based on their location or the potential for similar technologies to be used in the ultimate cleanup.

During the course of the RI/FS effort, certain conditions are occasionally identified which call for more immediate action. These actions are called "removal actions" and are initiated when there is a need to accelerate cleanup activities to address releases or potential releases of hazardous substances. Removal actions are coordinated with the U.S. EPA and the Ohio EPA.

Following is a progress report on Operable Unit 2 including its history, the current status of RI/FS activities, cleanup alternatives under consideration, and work that is being done to alleviate near-term concerns.

Background

Operable Unit 2 includes the solid waste landfill, lime sludge ponds, inactive flyash disposal area, active flyash pile and the southfield area. These areas were used to dispose of flyash from the boiler plant, spent lime from water treatment activities, sanitary waste and construction rubble from past operations at the Fernald site. While uranium is the primary contaminant, investigations are in progress to

determine the status of other hazardous constituents which may be present within Operable Unit 2 facilities.

RI/FS Activities

Sampling: DOE and U.S. EPA reached agreement on a series of actions resulting from the Fernald site's inability to meet schedule milestones for key documents leading up to the Record of Decision (ROD) for Operable Unit 2.

The Remedial Investigation (RI) report submitted last fall was disapproved by the U.S. EPA, which cited deficiencies in the environmental data used to define the extent of contamination and support risk assessment and other requirements of the RI report.

DOE requested and U.S. EPA denied an extension of the remainder of the Operable Unit 2 schedule to accommodate the need for additional field sampling and analysis to address the deficiencies cited by the EPA. The matter was resolved by the informal dispute resolution process under the terms of the 1991 Amended Consent Agreement.

Under the settlement, the December 10, 1993 ROD date for Operable Unit 2 has been extended until January 5, 1995. ROD dates for Operable Unit 1 (waste pit area), Operable Unit 3 (former production area), and Operable Unit 5 (environmental media) will be accelerated by 30 days each. DOE also agreed to spend at least \$2 million in performing a supplemental environmental project to reduce uranium discharges to the Great Miami River, and pay a \$50,000 penalty assessed by the U.S. EPA.

Additional field samples from Operable Unit 2 waste facilities have been collected for analysis to ensure that the data available provides a high confidence level for final cleanup recommendations. Validated laboratory results became available in September 1993.

Reports: Initial treatability studies to establish whether identified waste treatment technologies are effective have been completed for Operable Unit 2. A Treatability Study Report for Operable Unit 2 has been approved with comments by the U.S. EPA. Those comments are presently being addressed.

Remedial Design: Conceptual design engineering was initiated for Operable Unit 2 for purposes of establishing preliminary design parameters and cost estimates. Conceptual engineering is proceeding based upon adapting representative remedial action alternatives for each of the Operable Unit 2 waste facilities as identified in available RI/FS documents. Conceptual engineering is proceeding in parallel with the RI/FS to properly position Operable Unit 2 waste facilities for the prompt implementation of remedial action following issuance of the Record of Decision for Operable Unit 2.

Removal Action

Inactive Flyash Pile Erosion Control: The purpose of this activity was to stabilize the east bank of Paddy's Run adjacent to the Inactive Flyash Pile. Continuation of soil erosion could have eventually undermined the Inactive Flyash Pile's western slope and, over time, resulted in discharge of flyash and potentially contaminated waste and fill into Paddy's

Run. The first phase of the project was completed May 6, 1993, when a weighted rock berm was constructed to prevent further soil erosion. The need for possible additional action was evaluated. The final phase of construction, which implemented structural improvements necessary for long-term stability, was completed September 9, 1993.

Cleanup Alternatives 48 7 0

Several cleanup options are being evaluated for Operable Unit 2. One method would entail placing a cover over the wastes to cap them in place and prevent stormwater from carrying contaminants to groundwater and surface waterways.

Other options include removing the waste, treating it, and either disposing of it in an engineered structure at the Fernald site or transporting it to an approved off-site waste disposal facility.

More information about Operable Unit 2 is available in the Public Environmental Information Center (PEIC), where Fernald Project cleanup documents are kept in the Administrative Record. The PEIC is located in the JAMTEK building, 10845 Hamilton-Cleves Highway, Harrison, Ohio, 45030. The telephone number is (513) 738-0164.